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ALABAMA HISTORICAL COMMISSION

August 6, 2006

Mr. Keith Madison
Perc Engineering, Inc.
P. O. Box 1712
Jasper, AL 35502

Re: AHC 06-0754
Old Union Mine
Winston County, AL

468 South Perry Street
Montgomery, Alabama
36130-0900

tel 334 242•3184
fax 334 240•3477

Dear Mr. Madison:

Upon review of the cultural resource assessment conducted by P. E. LaMoreaux, the Alabama Historical Commission has determined the following. The results of the assessment indicate that there are no archaeological resources or standing structures listed on or eligible for the National Register of Historic Places within the project boundaries. Therefore, our office can concur with the proposed project.

We appreciate your efforts in helping us preserve Alabama's non-renewable cultural resources. Should you have any questions or comments or if we may be of further service, please contact Amanda McBride of this office and ***include the project number referenced above.***

Sincerely,

Elizabeth Ann Brown

Elizabeth Ann Brown
Deputy State Historic Preservation Officer

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ALABAMA HISTORICAL COMMISSION

May 4, 2006

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Mr. Keith Madison
Perc Engineering Co., Inc.
1606 Hwy. 78 W.
Jasper, AL 35501

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Sincerely,

Elizabeth Ann Brown

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Deputy State Historic Preservation Officer

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PELA

A Phase I Cultural Resource Assessment For An Addition to the Old Union Mine Permit Area, Winston County, Alabama

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Prepared For:

PERC Engineering Co., Inc.
1606 Highway 78 West
Jasper, Alabama 35501

Prepared By:

P.E. LaMoreaux & Associates, Inc.
PO Box 2310
Tuscaloosa, Alabama 35403

April 10, 2006

Terry L. Lolley, M.A., R.P.A.
Archaeologist

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INTRODUCTION

In April 2006, an archaeological team from P.E. LaMoreaux & Associates, Inc. (PELA) conducted a cultural resource survey for a proposed addition to the Old Union Mine permit area in Winston County, Alabama. The project was performed for Birmingham Coal & Coke, Inc. through PERC Engineering Co., Inc. The purpose of this investigation was to locate and document any prehistoric or historic archaeological resources present, and to obtain sufficient data about those resources to allow PELA to make any recommendations for avoidance or mitigation of adverse impacts to any sites from the proposed surface mining activities. The lead agencies for this project are the Office of Surface Mining (OSM) and the Alabama Surface Mining Commission (ASMC).

The total project area (Figure 1) consists of approximately 543 acres. Approximately 50 acres have been previously surveyed. In addition, several portions of the project area have been previously clear cut. The project area is located in Sections 1, 2, 11, and 14 of Township 12 South, Range 9 West on the Poplar Springs, Alabama (USGS 1969) topographic quadrangle. Graphics documenting the present state of the area with regard to terrain, general flora, and previous land-use are provided within this report (Figures 1 through 6).

Terry Lolley served as Principal Investigator for this project, and was assisted in the field by PELA technicians Curt Spikes and Rachel McCool. The fieldwork was conducted over a period of three days between March 31 and April 4, 2006.

LITERATURE AND DOCUMENT SEARCH

Prior to the fieldwork, a background literature review was performed. Neither the National Register of Historic Places (NRHP) nor the Alabama Register lists any historic properties within the project area. The portion of Winston County within the project area is not well represented on historic topographic maps. A review of an earlier soil map (USDA 1932), a topographic map (USGS 1893), county highway maps (ALDOT 1937, 1950), and aerial photography (USGS 1997) indicated one building within the project area during those times. The building was mapped on the 1932 soil map and the 1937 highway map adjacent to County Road 70 in the northeast quarter of Section 11. The *Historical Atlas of Alabama, Volume 2* (Remington 1999) did indicate an unnamed cemetery in the southwest portion of Section 2.

The primary source of information for the research was the Alabama State Archaeological Site Files (ASASF) maintained at the University of Alabama's Office of Archaeological Research at the Moundville Archaeological Park, Moundville, Alabama. No sites have been recorded within or adjacent to the project area. A previous survey was conducted in the southern portion of the project area (Figure 1; Hawsey 2005). A total of five isolated finds consisting of lithic debitage and historic artifacts were recorded during Hawsey's (2005) survey. A more recent survey was conducted east of Indian Creek and in the northern portion of the project area (Figure 1; Lolley 2006). A total of two isolated finds were recorded during that survey. Additional surveys in this portion of Winston County have primarily been conducted for proposed timbering in the Bankhead National Forest. Most sites recorded in this portion of the county consisted of bluff shelters along the larger drainages.

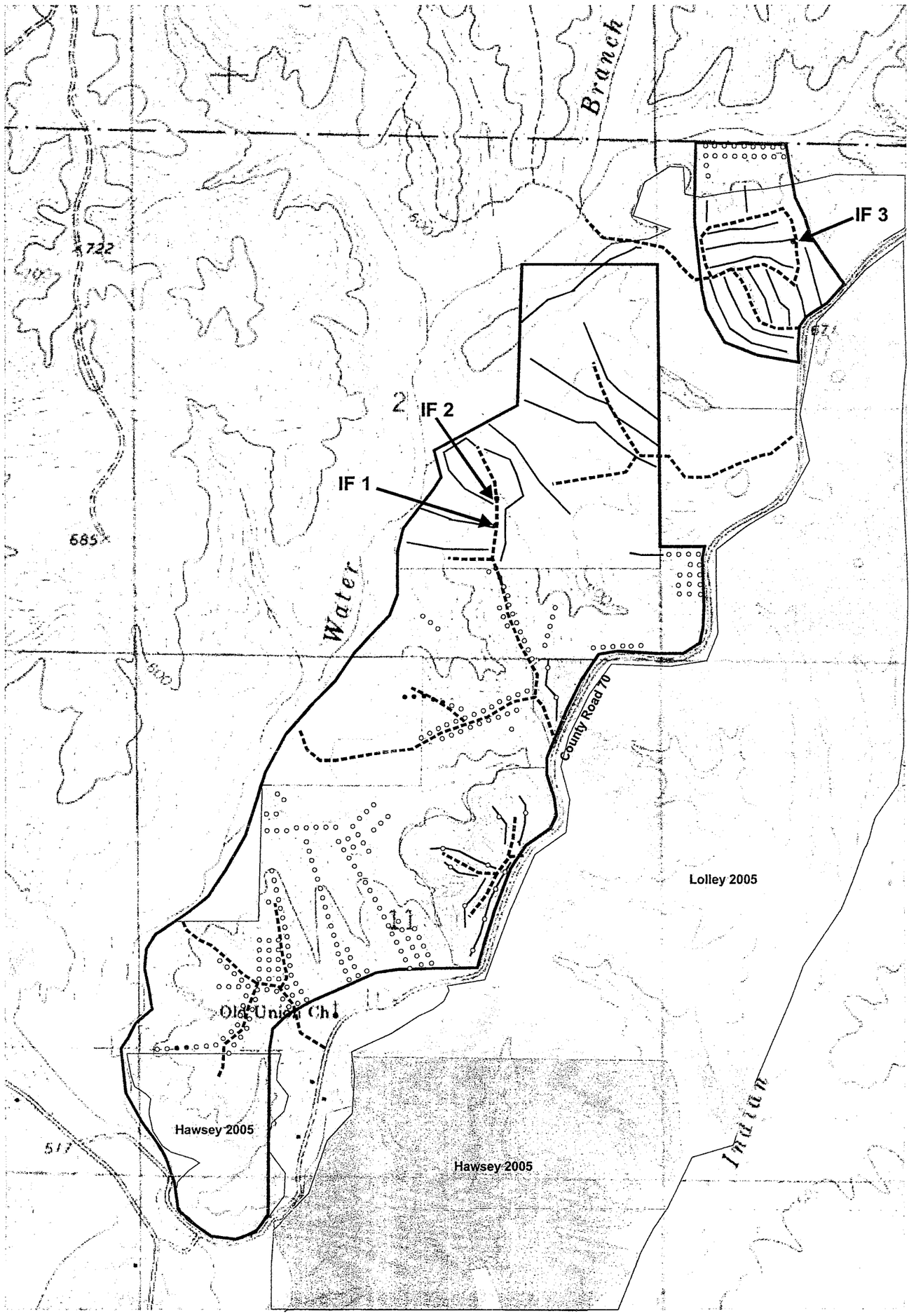

Figure 1. Project Area, Survey Coverage, and Land Features (Poplar Springs 1969 USGS 7.5' Topographic Quadrangle).

- Project Area
- Isolated Find
- Negative Shovel Test
- No Test Performed
- Transect
- Road
- Previous Survey
- More Recent Clear Cut
- 10-15 Yr Old Planted Pine

0 500 meters
0 2000 feet

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FIELD METHODS

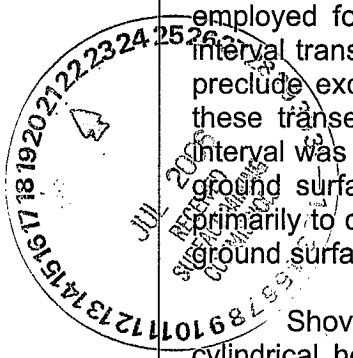
The project area lies within the Warrior Basin physiographic district. Land surface elevation for the project area ranges from 520 to 720 feet above mean sea level. The project area consists of numerous dissected ridges between small drainages and hollows with ridge spurs and moderate to steep slopes. Water Branch flows along the western border of the project area (Figure 1). Intermittent drainages are also located between some of the ridges.

Based on the interpretation of aerial photographs and discussions with members of the hunting clubs that lease land in the vicinity, portions of the project area were clear cut approximately 10-15 years ago and planted in pines. Several portions of the project area have been clear cut in the past year. Mature hardwoods were observed primarily on state-owned lands in the southern portion of Section 11. The ground surface on the clear cut uplands has been extensively eroded exposing the underlying bedrock and shale on the ground surface in many locations. The land planted in pines exhibits pushpiles, furrows, and very undulating ground surfaces. Figure 1 indicates areas where the ground disturbances were observed. In general, the pine planted and logged areas exhibited no intact surface soil beyond the accumulation of a humus layer.

There is a well developed network of roads in the project area that have been used for logging and for the hunting clubs. One green field was observed in the northwest portion of Section 1. The project area lacks any appreciable floodplain as the drainages are within narrow hollows.

The survey was conducted in accordance with procedural standards set by the Alabama Historical Commission. Land coverage requirements were achieved by physically walking and visually examining the project area. All roads and areas of ground surface exposure were visually examined for cultural material. Potential locations of bluff shelters were also examined, where appropriate.

Based on PELA's experience in the vicinity, reconnaissance of the project area, and preliminary shovel testing, it was determined that different testing strategies would be employed for land previously disturbed and for land undisturbed. A standard 30 meter interval transect pattern was employed where previous ground disturbance or slope did not preclude excavation (Figure 1). Shovel tests were excavated at 30 meter intervals along these transects. For areas in planted pines or logged (Figure 1), a 60 meter transect interval was employed with adaptive shovel testing based on the landforms present and the ground surface visibility/disturbance. Shovel tests along these transects were employed primarily to confirm previous observations of the absence of surface soils and the degree of ground surface disturbance.



Shovel tests that were excavated consisted of standard 30 centimeter (cm) diameter cylindrical holes excavated to the top of the underlying subsoil. Shovel test soils were passed through a 1/4" wire mesh screen to recover any cultural materials, which may have been present. Locations labeled as "no test performed" were done so due to excessive slope along the particular transects traversed. No delineation of surface finds was necessary due to the ground surface disturbance at those locations. The use of a handheld GPS and digital topographic maps aided in transect and shovel test mapping. The device has a stated accuracy between 3 to 5 meters.

The Winston County Soil Survey of 1937 indicates two primary soil associations within the project area (Swann et al. 1937). A description of each of the soil associations is presented below.

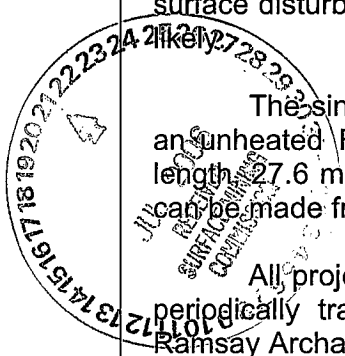
Hartsells very fine sandy loam, rolling phase: This well drained soil is located in upland areas and has a greater degree of slope than other marginal soils. The rolling phase of Hartsells very fine sandy loam has a surface layer of light-gray or pale-yellow very fine sandy loam to about 13 centimeters. The subsoil is dull-yellow or brownish-yellow very fine sandy clay or clay loam with weathered sandstone and shale fragments. When cleared, the surface layer is often washed away leaving subsoil at the surface. Due to its slope, the soil is suitable primarily for pine cultivation. This was the dominant soil on the ridgetops within the project area.

Holston very fine sandy loam: This mostly well drained soil is located in upland areas and its relief ranges from almost level to undulating and gently rolling. The surface layer is eight centimeters of gray sandy loam and is underlain by 15 centimeters of yellowish-gray friable very fine sandy clay or clay loam. The subsoil consists of brownish-yellow slightly heavy very fine sandy clay. The poorly drained soils are mostly wooded. This soil was mapped along a narrow ridge in the northeastern portion of Section 2.

A total of 235 shovel tests were excavated within the project area. An additional nine shovel tests were labeled as "no test performed." Shovel test profiles from the project area varied depending on whether the test was excavated within the planted pines or undisturbed areas. All of the shovel tests excavated within the previously disturbed areas revealed subsoil below any organic surface layer that may have been present. The subsoil ranged from brownish-yellow (10YR6/6) clay loam to red (2.5YR4/8) clay loam depending on the particular location of the shovel test. For the undisturbed areas, the soil colors were similar although depth to subsoil varied depending on the landforms. A general profile for the undisturbed areas along the uplands in Section 11 consisted of 0-3 centimeters of dark brown (10YR3/3) fine sandy loam, 3-31 centimeters of yellowish-brown (10YR5/6) fine sandy loam, and 31+ centimeters of yellowish-red (5YR5/8) clay. Every shovel test excavated contained various amounts of sandstone and shale fragments.

LABORATORY METHODS AND COLLECTION CURATION

The cultural material recovery (Table 1) from the project consisted of six historic artifacts and one prehistoric artifact. The historic material consisted of amethyst bottle glass (3), an opal glass lid liner (1), Albany glazed stoneware (1), and blue glazed stoneware (1). Each of these items was collected from a surface context in areas with extensive ground surface disturbance. Early to mid-twentieth century date ranges for the historic material are likely.



The single prehistoric find consisted of a projectile point distal fragment made from an unheated Fort Payne chert. The point fragment measures 27.4 millimeters (mm) in length, 27.6 mm in width, and 6.7 mm at its thickest point. No chronological determination can be made from the find due to its fragmented nature.

All project records and cultural material collected from cultural resource surveys are periodically transported for curation at the Office of Archaeological Research, Erskine Ramsay Archaeological Repository, at the University of Alabama Museums, Moundville.

Table 1. Cultural Material Inventory.

Isolated Find #	Provenience	Description	Quantity
1	Surface	Projectile point distal fragment Ft. Payne chert	1
2	Surface	Amethyst bottle glass	2
3	Surface	Amethyst square bottle base	1
3	Surface	Opal glass lid liner	1
3	Surface	Albany glazed stoneware	1
3	Surface	Blue glazed stoneware	1
		Total	**7**

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SURVEY RESULTS

The survey was initiated in the southern portion of the project area, north of a previously surveyed area (Figure 1). Several dirt roads traversed the center of the ridges. This portion of Section 11 was relatively undisturbed and vegetated with mature hardwoods with little undergrowth (Figure 2). Shovel test transects were primarily traversed along the level portions of the ridges as steep slopes were present along the ridge sides. Old Union Church and cemetery are located to the south of this portion of the project area. A buffer of approximately 300 feet will be employed around the church and cemetery. The existing church building is not original and exhibits a brick and vinyl siding exterior. There are approximately 74 marked and 78 unmarked graves in the cemetery. The earliest interment is W.C. Howell (1825-1871). The cemetery is still in use.

Portions of Section 11 have been clear cut in the past year while portions of the eastern edge of the project area in this section are planted in pines (Figures 3 and 4). These locations were examined by visual reconnaissance of the ground surface and limited shovel testing. A building was mapped on the 1932 soil map and the 1937 highway map adjacent to County Road 70 in the northeast quarter of Section 11. This portion of Section 11 has been logged and replanted in pines. No evidence of this building was observed during the survey of its mapped location.

The portion of the project area in Section 2 consisted almost entirely of lands previously clear cut. Shovel test transects were traversed in the southern portion of Section 2 along a ridgetop and within the base of a narrow hollow. Transects were traversed across the clear cut portions of Section 2 and visual reconnaissance of the dirt roads was also conducted. Two isolated finds (Figure 5) were recorded on the north end of the ridge. However, due to the slope and the extensive ground disturbance these finds may represent secondary deposition.

Isolated Find 1 (IF 1) was located during a traverse along a logging road (Figure 1). The find consisted of a single projectile point distal fragment. The ground surface along the road was further examined for additional cultural material with negative results. No shovel tests were conducted due to the ground surface disturbances. This find likely represents evidence of transitory use of the project area for prehistoric hunting activities.

Isolated Find 2 (IF 2) was located north of IF 1 and along the same logging road (Figure 1). The find consisted of two pieces of amethyst bottle glass within a few centimeters from each other. The ground surface along the road was further examined for additional cultural material with negative results. No shovel tests were conducted due to the ground surface disturbances.

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Figure 2. View of Undisturbed Portion of Section 11.

Figure 3. View of Previously Logged Portion of Section 11.

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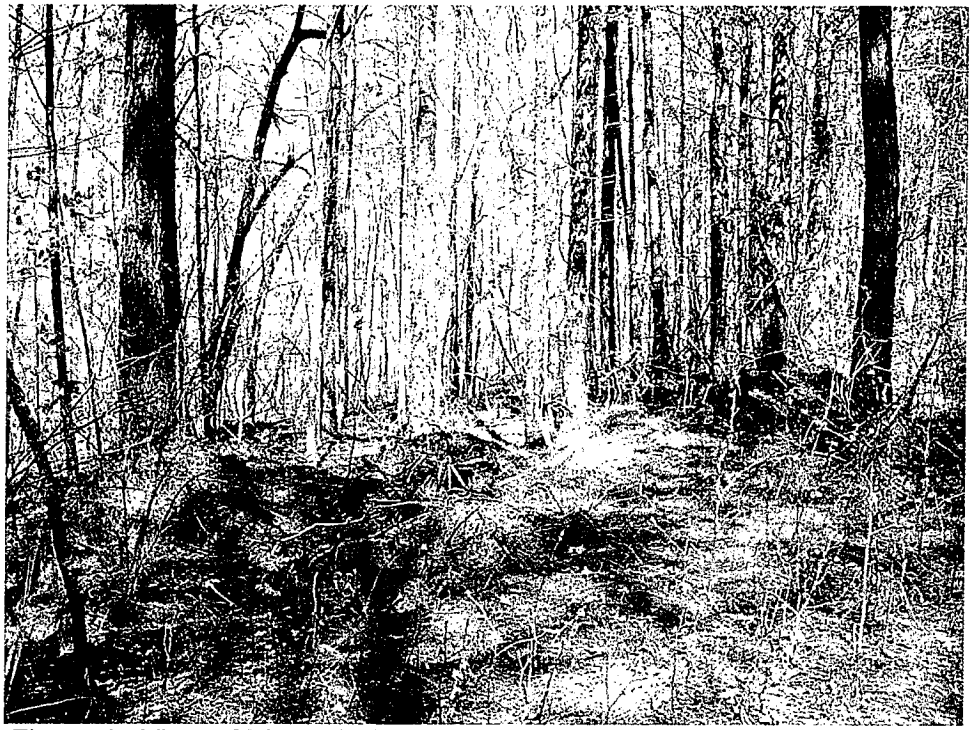

Figure 4. View of Planted Pines and Ground Disturbances in Section 11.

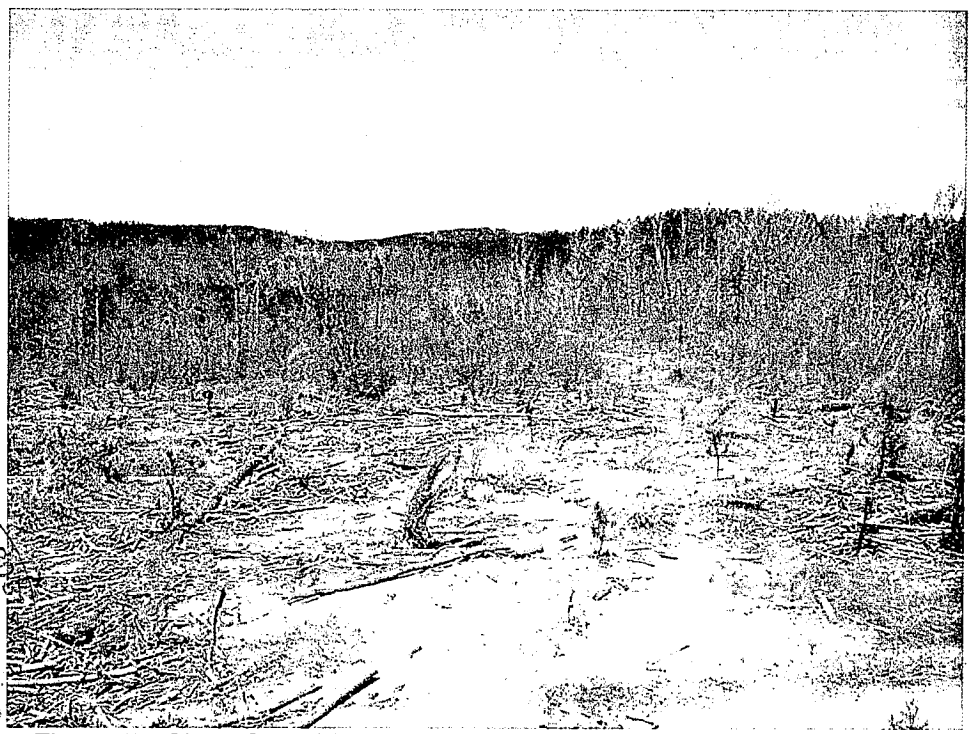

Figure 5. Clear Cut Ridge in Section 2 with IF 1 and 2 in Background.

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Figure 6. View of Section 1 and IF 3 Facing West.

The *Historical Atlas of Alabama, Volume 2* (Remington 1999) listed an unnamed cemetery in Section 2; however, its exact location is unknown. The only location information provided in the *Atlas* indicates the cemetery may be in the southwest portion of the section. If that is the case, the cemetery is outside the current project area. No indication of the cemetery was observed during the current fieldwork.

The final portion of the project investigated was in the northwest portion of Section 1. This area has been completely clear cut with some young pines present (Figures 1 and 6). A small knoll is the dominant landform in this portion of the project area. Logging roads encircle the knoll and also lead to a large green field. Transects were traversed across this portion of the project area and visual reconnaissance of the roads and green field. More recent clear cutting north of the knoll prevented ground surface observations or shovel testing due to the thickness of the tree cutting debris. Shovel tests were only excavated at the bottom of the ridge slope near a tributary of Water Branch. An isolated find was recorded in the eastern portion of the project area in Section 1.

Isolated Find 3 (IF 3) is located along a logging road in an area recently clear cut (Figures 1 and 6). The find consisted of two pieces of stoneware, an amethyst square bottle base, and an opal glass lid liner recovered within two meters from each other. No buildings were mapped at this location on any of the maps examined for the project. Due to the disturbed nature of the ground surface, the recorded location may not have been the original deposition location for the artifacts. A visual reconnaissance of the ground surface around the find did not lead to the recovery of any additional material or any surface evidence of a structure. One shovel test was excavated on the side of the road to determine if additional testing would be beneficial, however the yellowish-red subsoil was present beneath the logging debris.

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SURVEY INTERPRETATION AND EVALUATION

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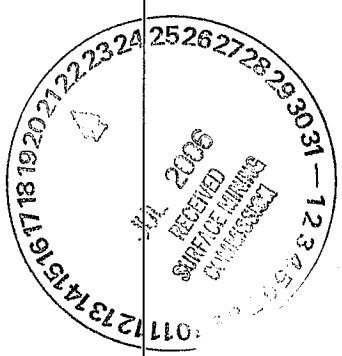
Overall, the project area has been extensively disturbed from previous logging activities and subsequent ground surface erosion. While the surface water sources within the project area consisted primarily of intermittent drainages, Water Branch is located along the western border of portions of the project area (Figure 1). Previous surveys in the vicinity have only yielded isolated surface finds due to the extent of previous ground disturbing activities and the landforms investigated. The most likely location for prehistoric sites within the project area was the level uplands since other portions were primarily slope. However, the previous ground disturbances and the characteristics of the upland soils have resulted in the erosion of the ground surface layer over the majority of those areas. The absence of broad floodplains, the lack of readily available raw material, and the presence of steep slopes would likely have resulted in this area being only minimally exploited in prehistory.

RECOMMENDATIONS

This survey was conducted by P.E. LaMoreaux & Associates, Inc. (PELA) for Birmingham Coal & Coke, Inc. through PERC Engineering Co., Inc. in compliance with Federal and State regulations. As stated in the introduction, the purpose of this investigation was to locate and document any prehistoric and historic archaeological resources present, and to obtain sufficient data about those resources to allow PELA to make any recommendations for avoidance or mitigation of adverse impacts to any sites from the proposed surface mining activities.

The majority of the project area has been disturbed and altered by previous pine planting, logging, and subsequent ground surface erosion resulting from these activities. The likelihood that intact cultural remains exist in the project area is extremely low. It is PELA's recommendation that the project area be cleared from further cultural resource investigations due to the lack of any resources that are potentially eligible or eligible for the NRHP.



REFERENCES

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Alabama Department of Transportation (ALDOT)
1937 Winston County Highway Map.
1950 Winston County Highway Map.

Hawsey, Kareen L.
2005 *A Phase I Cultural Resources Reconnaissance of the Proposed Poplar Springs West Mine near Nauvoo, Winston County, Alabama.* Report Submitted to McGehee Engineering, Inc., Jasper, Alabama. University of Alabama Museums, Office of Archaeological Research, Moundville, Alabama.

Lolley, Terry L.
2006 *A Phase I Cultural Resource Assessment for the Proposed Poplar Springs North Mine Near Nauvoo, Winston and Walker Counties, Alabama.* Report Submitted to McGehee Engineering, Inc., Jasper, Alabama. P.E. LaMoreaux & Associates, Inc., Tuscaloosa, Alabama.

Remington, W. Craig (editor)
1999 *Historical Atlas of Alabama, Volume 2, Cemetery Locations by County.* Department of Geography, College of Arts and Sciences, University of Alabama, Tuscaloosa.

Swann, M.E., M.E. Stevens, M.C. Croft, and W.E. Tharp
1937 *Soil Survey of Winston County, Alabama.* United States Department of Agriculture, Washington, D. C.

United States Department of Agriculture
1932 Winston County Soil Map.

United States Geological Survey
1893 Jasper 30' Topographic Quadrangle.
1969 Poplar Spings 7.5 Minute Topographic Quadrangle.
1997 Aerial Photograph.

PELA

A Phase I Cultural Resource Assessment For the Proposed Old Union Mine, Winston County, Alabama

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Prepared For:

PERC Engineering Co., Inc.
1606 Highway 78 West
Jasper, Alabama 35501

Prepared By:

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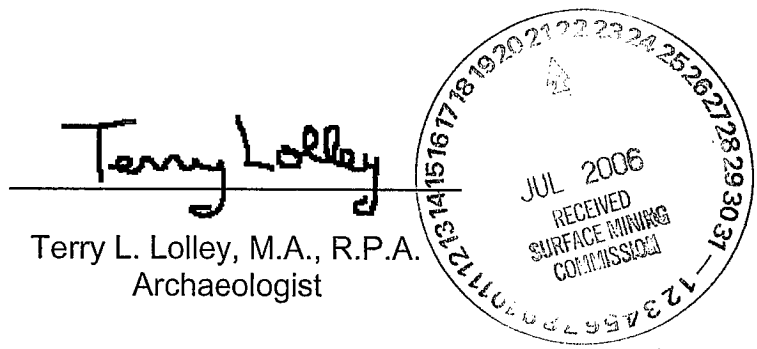
PO Box 2310
Tuscaloosa, Alabama 35403

March 16, 2006



Terry L. Lolley, M.A., R.P.A.
Archaeologist

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INTRODUCTION

In March 2006, an archaeological team from P.E. LaMoreaux & Associates, Inc. (PELA) conducted a cultural resource survey for the proposed Old Union Mine in Winston County, Alabama. The project was performed for Birmingham Coal & Coke, Inc. through PERC Engineering Co., Inc. The purpose of this investigation was to locate and document any prehistoric and historic archaeological resources present, and to obtain sufficient data about those resources to allow PELA to make any recommendations for avoidance or mitigation of adverse impacts to any sites from the proposed surface mining activities. The lead agencies for this project are the Office of Surface Mining (OSM) and the Alabama Surface Mining Commission (ASMC).

The total project area (Figure 1) consists of approximately 1,240 acres. Approximately 565 acres have been previously surveyed. In addition, a large portion of the project area has been previously clear cut. The project area is located in Section 36 of Township 11 South, Range 9 West and Sections 1, 11, 12, 13, and 14 of Township 12 South, Range 9 West on the Poplar Springs North (USGS 1969) and Nauvoo (USGS 1981), Alabama topographic quadrangles. Graphics documenting the present state of the area with regard to terrain, general flora, and previous land-use are provided within this report (Figures 1 through 6).

Terry Lolley served as Principal Investigator for this project, and was assisted in the field by PELA technicians Curt Spikes and Jimmy Mawk. The fieldwork was conducted over a period of five days between March 1 and March 7, 2006.

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LITERATURE AND DOCUMENT SEARCH

Prior to the fieldwork, a background literature review was performed. Neither the National Register of Historic Places (NRHP) nor the Alabama Register lists any historic properties within the project area. The portion of Winston County within the project area is not well represented on historic topographic maps. A review of an earlier soil map (USDA 1932), a topographic map (USGS 1893), county highway maps (ALDOT 1937, 1950), and aerial photography (USGS 1997) indicated several buildings adjacent to County Road 70 during those times. The existing buildings are of modern construction, apparently replacing those present on earlier maps. None of the buildings are located within the project area.

The primary source of information for the research was the Alabama State Archaeological Site Files (ASASF) maintained at the University of Alabama's Office of Archaeological Research at the Moundville Archaeological Park, Moundville, Alabama. No sites have been recorded within or adjacent to the project area. A previous survey was conducted in the southern portion of the project area (Figure 1; Hawsey 2005). A total of five isolated finds consisting of lithic debitage and historic artifacts were recorded during Hawsey's (2005) survey. A more recent survey was conducted east of Indian Creek and in the northern portion of the project area (Figure 1; Lolley 2006). A total of two isolated finds were recorded during that survey. Additional surveys in this portion of Winston County have primarily been conducted for proposed timbering in the Bankhead National Forest. Most sites recorded in this portion of the county consisted of bluff shelters along the larger drainages.

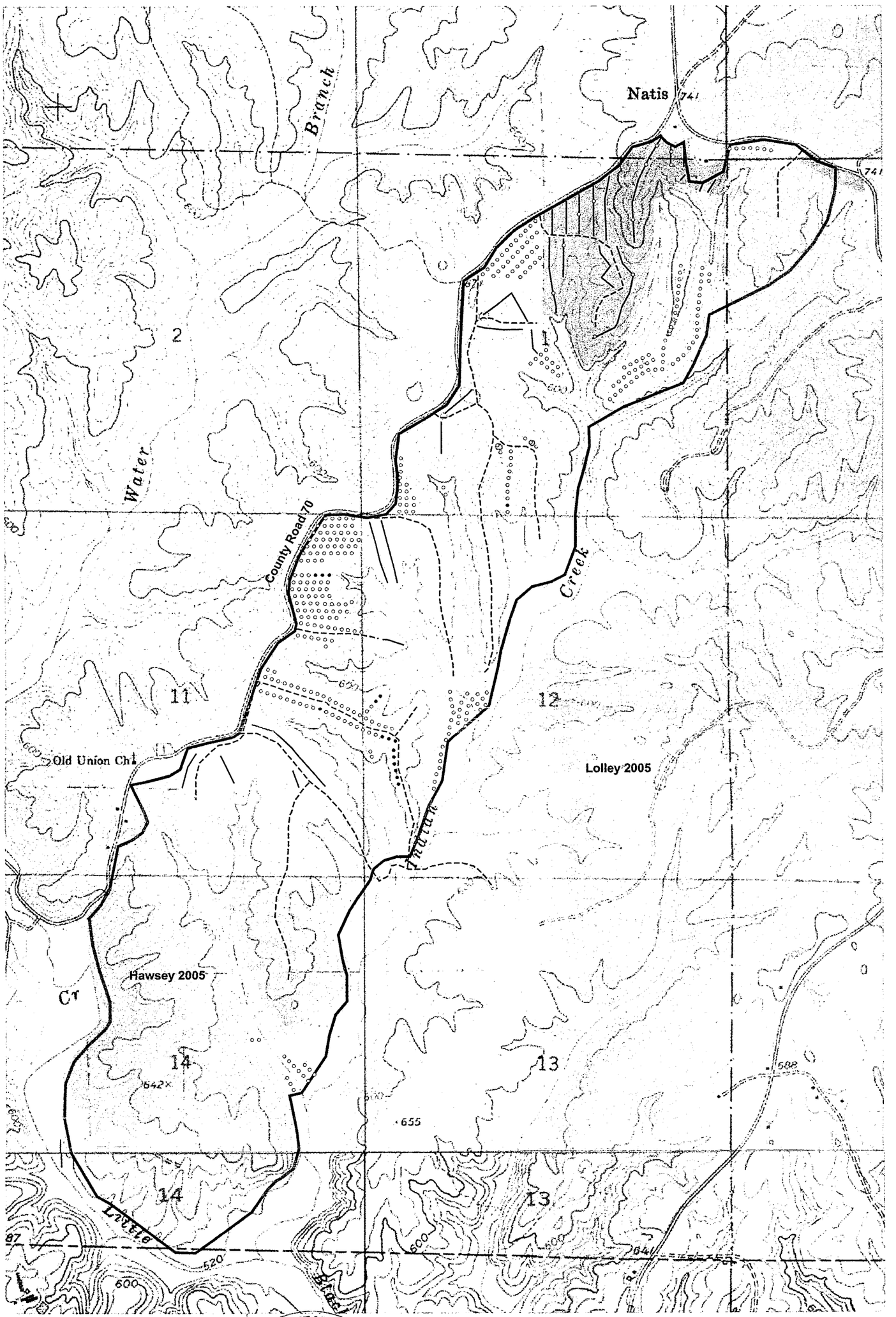

Figure 1. Project Area, Survey Coverage, and Land Features (Poplar Springs 1969 and Nauvoo 1981USGS 7.5' Topographic Quadrangles).

- Project Area
- Road
- Negative Shovel Test
- No Test Performed
- Transect
- Previous Survey
- Logged in 2005
- 15-20 yr Planted Pines

0 500 meters
2000 feet

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FIELD METHODS

The project area lies within the Warrior Basin physiographic district. Land surface elevation for the project area ranges from 520 to 720 feet above mean sea level. The project area consists of numerous dissected ridges between small drainages with ridge spurs and moderate to steep slopes. Little Blackwater Creek flows along the southern border of the project area (Figure 1). Indian Creek is located outside the eastern bounds of most of the project area. Intermittent drainages are also located between most of the ridges.

Based on the interpretation of aerial photographs and discussions with members of the hunting clubs that lease most of the land, the majority of the project area was clear cut approximately 15-20 years ago and planted in pines. Several portions of the project area have been logged in the past year. Mature hardwoods were observed primarily along some of the slopes and on state-owned lands in Sections 1, 11, and 12. The ground surface on the uplands has been extensively eroded exposing the underlying bedrock and shale on the ground surface in many locations. The land planted in pines exhibits pushpiles, furrows, and very undulating ground surfaces. Figure 1 indicates areas where the ground disturbances were observed. In general, the pine planted and logged areas exhibited no intact surface soil beyond the accumulation of a humus layer.

There is a well developed network of roads in the project area that have been used for logging and for the hunting clubs. Two green fields were observed in the northern portion of the project area. The project area lacks any appreciable floodplain as the drainages are within narrow hollows.

The survey was conducted in accordance with procedural standards set by the Alabama Historical Commission. Land coverage requirements were achieved by physically walking and visually examining the project area. All roads and areas of ground surface exposure were visually examined for cultural material. Potential locations of bluff shelters were also examined, where appropriate.

Based on PELA's experience in the vicinity, reconnaissance of the project area, and preliminary shovel testing, it was determined that different testing strategies would be employed for land previously disturbed and for land undisturbed. A standard 30 meter interval transect pattern was employed where previous ground disturbance or slope did not preclude excavation (Figure 1). Shovel tests were excavated at 30 meter intervals along these transects. For areas in planted pines or logged (Figure 1), a 60 meter transect interval was employed with adaptive shovel testing based on the landforms present and the ground surface visibility/disturbance. Shovel tests along these transects were employed primarily to confirm previous observations of the absence of surface soils and the degree of ground surface disturbance.

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The Winston County Soil Survey of 1937 indicates three primary soil associations within the project area (Swann et al. 1937). A description of each of the soil associations is presented below.

Guin soils, undifferentiated: This soil includes a mixture of many classes and types of soils. It is primarily comprised of residue left by streams that have cut through the coastal plains deposits into the shale and sandstone, causing the materials to become mixed. Natural surface drainage is excessive in this rough terrain, and erosion is likely to occur if the land is cleared. Landforms included in this classification are long winding ridges, sharp knolls, peaks, hills, and deep V-shaped valleys. The land is not suitable for most cultivated crops but is favorable to pine cultivation. These soils were present along the narrow drainageways within the project area.

Hartsells very fine sandy loam, rolling phase: This well drained soil is located in upland areas and has a greater degree of slope than other marginal soils. The rolling phase of Hartsells very fine sandy loam has a surface layer of light-gray or pale-yellow very fine sandy loam to about 13 centimeters. The subsoil is dull-yellow or brownish-yellow very fine sandy clay or clay loam with weathered sandstone and shale fragments. When cleared, the surface layer is often washed away leaving subsoil at the surface. Due to its slope, the soil is suitable primarily for pine cultivation. This was the dominant soil on the ridgetops within the project area.

Holston very fine sandy loam: This mostly well drained soil is located in upland areas and its relief ranges from almost level to undulating and gently rolling. The surface layer is eight centimeters of gray sandy loam and is underlain by 15 centimeters of yellowish-gray friable very fine sandy clay or clay loam. The subsoil consists of brownish-yellow slightly heavy very fine sandy clay. The poorly drained soils are mostly wooded. This soil was mapped along the floodplain of Indian Creek.

A total of 350 shovel tests were excavated within the project area. An additional 16 shovel tests were labeled as "no test performed." Shovel test profiles from the project area varied depending on whether the test was excavated within the planted pines or undisturbed areas. All of the shovel tests excavated within the previously disturbed areas revealed subsoil below any organic surface layer that may have been present. The subsoil ranged from brownish-yellow (10YR6/6) clay loam to red (2.5YR4/8) clay loam depending on the particular location of the shovel test. For the undisturbed areas, the soil colors were similar although depth to subsoil varied depending on the landforms. A general profile for the undisturbed areas along the uplands consisted of 0-25 centimeters of dark brown (10YR3/3) fine sandy loam, overlying yellowish-brown (10YR5/8) clay or clay loam. Shovel tests along the floodplain of Indian Creek consisted of 0-5 centimeters of dark gray (10YR4/1) sandy loam, 5-35 centimeters of brown (10YR5/3) silt loam, and a yellowish-brown (10YR 5/6) clay loam subsoil. Every shovel test excavated contained various amounts of sandstone and shale fragments.

LABORATORY METHODS AND COLLECTION CURATION

All project records and cultural material collected from cultural resource surveys are periodically transported for curation at the Office of Archaeological Research, Erskine Ramsay Archaeological Repository, at the University of Alabama Museums, Moundville.

SURVEY RESULTS

The survey was initiated in the southern portion of the project area, north of a previously surveyed area (Figures 1 and 2). The trees along the ridges in this portion of the project area had been clear cut, and several roads traverse the ridgetops. The roads along these ridges were visually examined for cultural material and transects were traversed along the level landforms. Old Union Church and cemetery are located to the west and across County Road 70. A buffer of approximately 300 feet will be employed around the church and cemetery. Similar buffers will also be employed around nearby residences. The existing church building is not original and exhibits a brick and vinyl siding exterior. There are approximately 74 marked and 78 unmarked graves in the cemetery. The earliest interment is W.C. Howell (1825-1871). The cemetery is still in use.

The survey continued northward in an area of mature hardwoods and pines. A dirt road traversed the middle of the ridge and continued down slope toward Indian Creek (Figure 1). The narrowness of the ridge resulted in only two transects traversed parallel to the road. Shovel tests not performed were done so due to slope. The northeastern and southeastern portions of this ridge were clear cut and the landforms were visually examined for cultural material on the surface.

Continuing northward in Section 11 on the eastern side of County Road 70, another area of undisturbed woods was observed (Figure 3). A series of transects were traversed west to east following available landforms and a dirt road. The road was visually examined for cultural material, however none was observed. The line between Sections 11 and 12 were used in the past as a boundary for timber cutting. The majority of Section 12 was devoid of trees and exhibited erosion of the ground surface along the narrow ridges (Figure 4).

Several transects were traversed along the narrow floodplain of Indian Creek in Section 12 (Figure 1). This area contained sparse hardwoods and tall grass. Some areas near the drainages that flowed into Indian Creek were inundated. No cultural material was recovered from the shovel testing along the floodplain.

The portion of the project area in Section 1 consisted of clear cut areas, planted pines, previously surveyed areas, and mature hardwoods (Figure 1). Shovel test transects were traversed along landforms that were not previously disturbed from past logging activities. These areas consisted mainly of narrow ridges and moderate slopes. The disturbed portions of Section 1 (Figures 5 and 6) were traversed at greater transect intervals and shovel testing was performed to confirm ground surface disturbances. No cultural material was recovered from Section 1.

SURVEY INTERPRETATION AND EVALUATION

Overall, the project area has been extensively disturbed from previous logging activities and subsequent ground surface erosion. While the surface water sources within the project area consisted primarily of intermittent drainages, Indian Creek and Little Blackwater Creek are located along the border of portions of the project area (Figure 1). Surface Isolated Finds have been recorded during a previous survey in the southern portion of the project area, though the landforms in that portion were broader and more level and no recent clear cutting had occurred at the time of the survey (Hawsey 2005). The most likely location for prehistoric sites within the project area was the level uplands and possibly the

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Figure 2. View of Ridge in Southern Portion of the Project Area.

Figure 3. View of Undisturbed Portion of Section 11.

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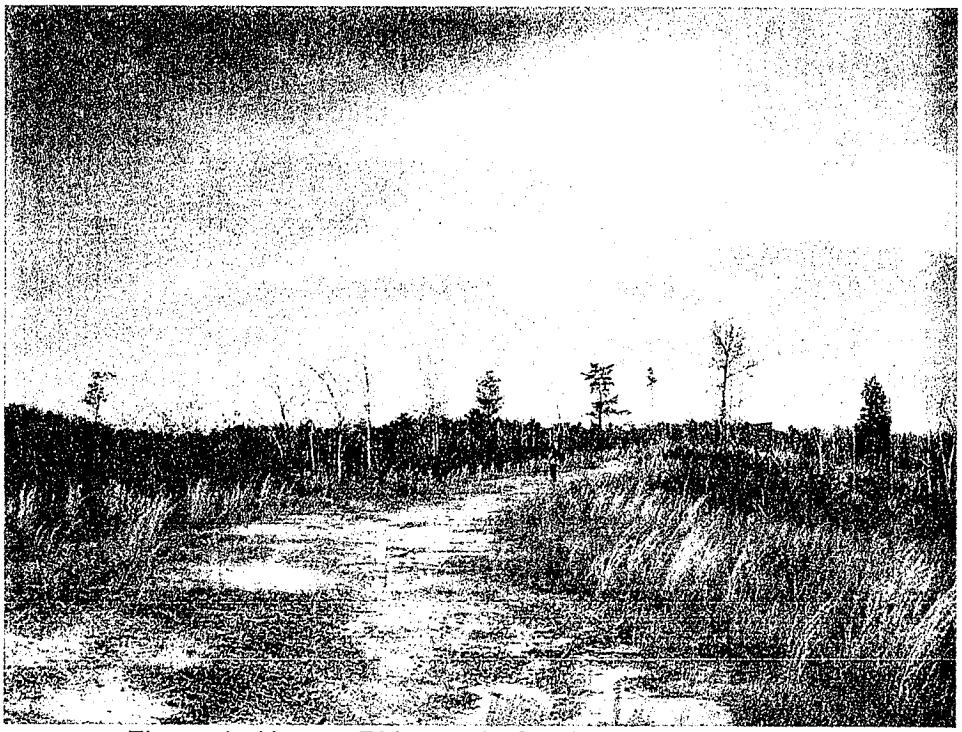

Figure 4. Narrow Ridgetop in Section 12 Facing North.

Figure 5. End of Ridge in Section 1 Facing Southward.

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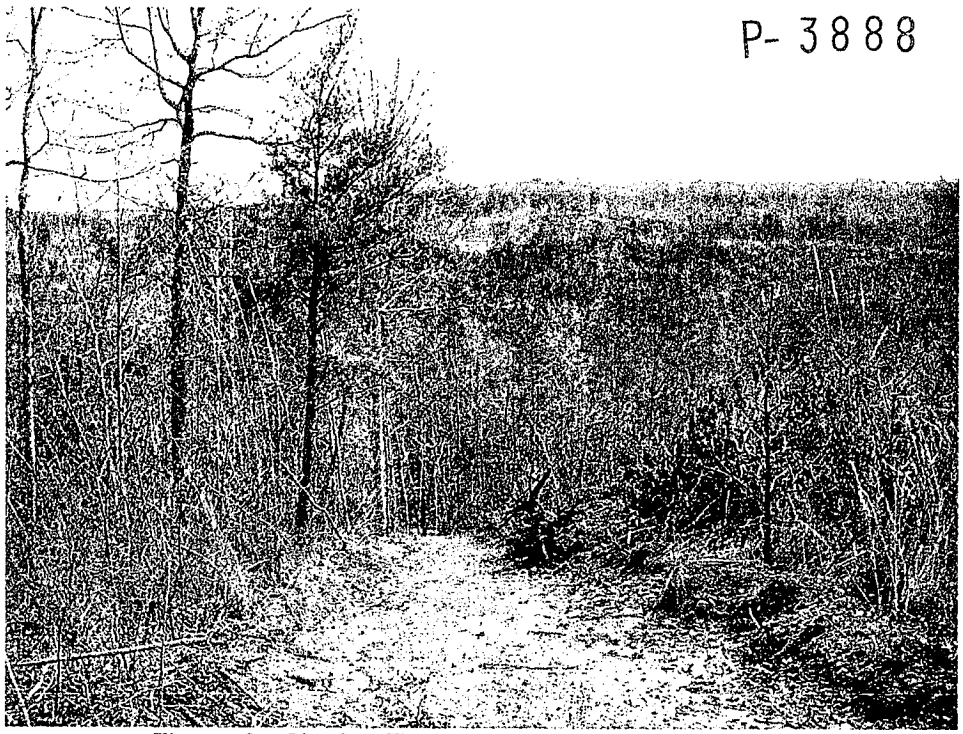

Figure 6. Sloping Terrain in Section 1 Facing East.

narrow floodplain along Indian Creek. However, the previous ground disturbances and the characteristics of the upland soils have resulted in the erosion of the ground surface layer over the majority of those areas. The narrowness of the floodplain and the steep slopes would likely have resulted in this area being only minimally exploited in prehistory.

RECOMMENDATIONS

This survey was conducted by P.E. LaMoreaux & Associates, Inc. (PELA) for Birmingham Coal & Coke, Inc. through PERC Engineering Co., Inc. in compliance with Federal and State regulations. As stated in the introduction, the purpose of this investigation was to locate and document any prehistoric and historic archaeological resources present, and to obtain sufficient data about those resources to allow PELA to make any recommendations for avoidance or mitigation of adverse impacts to any sites from the proposed surface mining activities.

The majority of the project area has been severely disturbed and altered by previous pine planting, logging, and subsequent ground surface erosion resulting from these activities. The likelihood that intact cultural remains exist in the project area is extremely low. It is PELA's recommendation that the project area be cleared from further cultural resource investigations due to the lack of any resources that are potentially eligible or eligible for the NRHP.

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REFERENCES

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Alabama Department of Transportation (ALDOT)
1937 Winston County Highway Map.
1950 Winston County Highway Map.

Hawsey, Kareen L.
2005 *A Phase I Cultural Resources Reconnaissance of the Proposed Poplar Springs West Mine near Nauvoo, Winston County, Alabama.* Report Submitted to McGehee Engineering, Inc., Jasper, Alabama. University of Alabama Museums, Office of Archaeological Research, Moundville, Alabama.

Lolley, Terry L.
2006 *A Phase I Cultural Resource Assessment for the Proposed Poplar Springs North Mine Near Nauvoo, Winston and Walker Counties, Alabama.* Report Submitted to McGehee Engineering, Inc., Jasper, Alabama. P.E. LaMoreaux & Associates, Inc., Tuscaloosa, Alabama.

Swann, M.E., M.E. Stevens, M.C. Croft, and W.E. Tharp
1937 *Soil Survey of Winston County, Alabama*. United States Department of Agriculture, Washington, D. C.

United States Department of Agriculture
1932 Winston County Soil Map.

United States Geological Survey
1893 Jasper 30' Topographic Quadrangle.
1969 Poplar Spings 7.5 Minute Topographic Quadrangle.
1981 Nauvoo 7.5 Minute Topographic Quadrangle.
1997 Aerial Photograph.